

**ABSTRACT**

A drug delivery conformal film system according to the present invention  
5 is adapted to be compounded and applied, by medical personnel at the point of  
use, to a medical device such as a cardiovascular and urology stent,  
pacemaker, vascular graft, suture ring of mechanical heart valve, implantable  
infusion port, implantable drug delivery pump, orthopedic hardware and  
appliance, and, neurological stimulating device. The drug delivery conformal  
10 film consists of one of three in vivo biocompatible; biodegradable, bio-erodable  
or bioabsorbable embodiments: (1) cross-linked sodium alginate, (2) UV photo-  
active polymer, or, (3) hydrogels. An implantable medical device such as the  
stent or suture ring of a mechanical artificial heart valve is coated with an in  
vivo biocompatible; biodegradable or bioerodable or bioabsorbable solution  
15 comprising a polymer and containing a drug, the solution is cross-linked or  
cured to form a film on the device immediately prior to placement in the body.  
When the coated device is introduced into the body, the drug contained in the  
coating is released in a local region. The invention provides a point of use in  
vivo drug delivery system whereby the drug and its concentration can be  
20 selected by medical personnel immediately prior to implantation of the medical  
device.